A. Ueki and T. Suto: Vitamin requirement of sulfate-reducers isolated from sewage digestor fluids 229
T. Itoh, T. Iwata, K. Izaki, and H. Takahashi: Mode of action of a bacteriocin from *Erwinia carotovora* III. Properties of phospholipase a of *Erwinia carotovora* and its involvement in phospholipid degradation caused by carotovoricin 239
T. Hattori: Probabilistic features of the proliferation of soil bacteria 253
K. Suzuki, H. Saito, A. Kawaguchi, S. Okuda, and K. Komagata: Occurrence of ω-cyclohexyl fatty acids in *Curtobacterium pusillum* strains 261

Short Communication

R. M. Johnson, H. Maeda, and D. Kakimoto: Factors effecting viability and pigment of *Alteromonas luteoviolaceus* 267
T. Yamanaka and Y. Kamita: Purification and some properties of a C-type cytochrome derived from *Photobacterium phosphoreum* 273

Number 4, August 1981

H. Miyata, M. Miyata, and M. Ito: The cell cycle in the fission yeast, *Schizosaccharomyces pombe*. VI. Relationship between cell size and division delay due to nutritional shift-up 277
R. Hattori and T. Hattori: Growth rate and molar growth yield of *Escherichia coli* adsorbed on an anion-exchange resin 287
T. Hara, A. Aumayr, and S. Ueda: Characterization of plasmid deoxyribonucleic acid in *Bacillus natto*: evidence for plasmid-linked PGA production 299
M.-Paule K.-L'homme, A. Arnaud et P. Galzy: Etude d'une L-α-aminoamidase particulaire de *Brevibacterium* sp. en vue de l'obtention d'acides α-amines optiquement actifs 307
Y. Takada, N. Fukunaga, and S. Sasaki: Temperature-dependence and distribution of NADH dehydrogenase in a psychrophilic bacterium, *Vibrio* sp. strain ABE-1 327
L. Iyengar and A. V. S. Prabhakara Rao: Immobilization of invertase on molecular sieve by metal-link method 339

Short Communication

S. Goto: Reproduction by multilateral budding of two strains of *Kloeckera corticis* 349
K. Matsumoto, M. Hiruta, Y. Mizukami, and H. Hirokawa: Close relationship between *Bacillus* phages M2 and Nf: Physical mapping of the DNA by six restriction endonucleases 353

Number 5, October 1981

K. Nunomura and T. Fujita: Calorimetric study of the endogenous metabolism of yeast ... 357
H. Miyata and M. Miyata: Mode of conjugation in homothallic cells of *Schizosaccharomyces pombe* 365
T. Isogai, H. Takahashi, and H. Saito: Actinophage R4 as a DNA cloning vector in *Streptomyces* 373
T. Urakami and K. Komagata: Electrophoretic comparison of enzymes in the gram negative methanol-utilizing bacteria 381
Y. Yamada, M. Nunoda, T. Ishikawa, and Y. Tahara: The cellular fatty acid composition in acetic acid bacteria 405

Short Communication

H. SHIMOTSU, F. KAWAMURA, and H. SAITO: Convenience of bacteriophage φ1E1 vector for cleavage analysis of cloned DNA fragments: a physical mapping of *Eco*RI-fragment containing *Bacillus subtilis metb*$^+$ gene 419

K. MATSUSHIMA, M. HAYAKAWA, M. ITO, and K. SHIMADA: Features of the proteolytic enzyme system of hyper-acid-productive and non-acid-productive fungi 423

Y. NISHIMURA, M. SHIMADZU, and H. IIZUKA: Bacteriochlorophyll formation in radiation-resistant *Pseudomonas radiora* 427

T. ISOGAI, H. TAKAHASHI, and H. SAITO: Polyethyleneglycol-induced transformation of *Streptomyces protoplasts* by chromosomal DNA 431

Number 6, December 1981

J. ANTHEUNISSE: Decay of coconut fibres by soil microorgamisms 435

H. KIYOHARA, K. NAGAO, and K. YANO: Isolation and some properties of NAD-linked 2-carboxybenzaldehyde dehydrogenase in *Alcaligenes faecalis* AFK2 grown on phenanthrene 443

A. UEKI, R. AZUMA, and T. SUTO: Characterization of sulfate-reducing bacteria isolated from sewage digestor fluids 457

Y. YAMADA, T. ISHIKAWA, M. YAMASHITA, Y. TAHARA, K. YAMASATO, and T. KANEKO: Deoxyribonucleic acid base composition and deoxyribonucleic acid homology in acetic acid bacteria, especially in the polarly flagellated intermediate strains 465

K. NISHIDA, M. TAKAGI, and K. YANO: *Escherichia coli* cell inactivation by superoxide anion and hydrogen peroxide 477

T. SEKI and S. FUKUDA: Purification and some properties of 2′,3′-cyclic phosphodiesterase from the cell-free extract of *Bacillus subtilis* var. *amyloliquefacus* 487

J. JOHNSEN: Presence of β-lactamase and penicillin acylase in a *Pseudomonas* sp. utilizing benzylpenicillin as a carbon source 499

Short Communication

Y. Y. CHUN, M. IIDA, and H. IIZUKA: Stuies on microbial transformations XIX. Use of immobilized cells of *Streptomyces roseochromogenes* for the 16α-hydroxylation of dehydroepiandrosterone 505

N. SANDO, I. MIYAKAWA, S. NISHIBAYASHI, and T. KUROIWA: Arrangement of mitochondrial nucleoids during life cycle of *Saccharomyces cerevisiae* 511

M. DABEK-SZRENIAWSKA and T. HATTORI: Winogradsky's salts solution as a diluting medium for plate count of oligotrophic bacteria in soil 517